

## The steps to install robot arm package and RIVz.

1.1 Open new terminal.

1.2 Create a new folder with the name catkin\_ws, inside it create a folder named src. By the command:

```
"mkdir -p ~/catkin_ws/src "
```

1.3 change directory to the catkin\_ws folder that we already created.

```
"cd ~/catkin_ws/ "
```

And then ;

```
"catkin_make"
```

```
"cd ~/catkin_ws/src "
```

1.4 Download the packages inside catkin\_ws/src folder:

```
"git clone https://github.com/smart-methods/arduino_robot_arm.git "
```

And then;

```
"cd ~/catkin_ws"
```

```
"rosdep install --from-paths src --ignore-src -r -y"
```

```
"sudo apt-get install ros-noetic-moveit"
```

```
"sudo apt-get install ros-noetic-joint-state-publisher ros-noetic-joint-state-publisher-gui"
```

```
"sudo apt-get install ros-noetic-gazebo-ros-control joint-state-publisher"
```

```
"sudo apt-get install ros-kinetic-ros-controllers ros-noetic-ros-control"
```

Now in need to edit the file " .bashrc " and add the source to the end of file:

```
"sudo nano ~/.bashrc"
```

At the end add this line:

```
"source /home/nada/catkin_ws/devel/setup.bash"
```

press ctrl + o to save the changes with the command:

```
"source ~/.bashrc"
```

Now launch RIVz by the command:

```
"roslaunch robot_arm_pkg check_motors.launch"
```

